Amplitude-Phase Form of a Sinusoid

Quiz: Amplitude-Phase Form of a Sinusoid.

Put $cos(\omega t) + \sqrt{3}sin(\omega t)$ into amplitude-phase form $Acos(\omega t - \phi)$?

Choices:

- a) $2\cos\left(\omega t \frac{\pi}{4}\right)$
- b) $\sqrt{3}\cos\left(\omega\left(t-\frac{\pi}{3}\right)\right)$
- c) $2\cos\left(\omega\left(t-\frac{\pi}{3}\right)\right)$
- d) $2\cos\left(\omega t \frac{\pi}{3}\right)$
- e) $\sqrt{3}\cos\left(\omega t \frac{\pi}{3}\right)$
- f) $\sqrt{3}\cos\left(\omega t \frac{\pi}{4}\right)$

Pick what you think is the correct choice and then look at the answer.

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